

IN THE CLAIMS

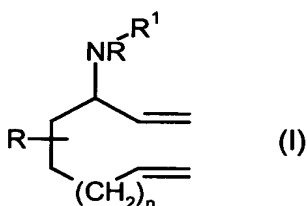
Please cancel Claims 43-55:

1-42. (Previously cancelled)

43-55. (Currently Cancelled)

Please add new Claims 56-67:

56. (New) A process for preparing a cyclic compound comprising subjecting a starting material in the presence of a catalyst component to metathesis reaction in the presence of an ionic liquid, and thereby forming the cyclic compound, wherein the starting material is a  $\alpha,\omega$ -diene having the formula (I)



wherein

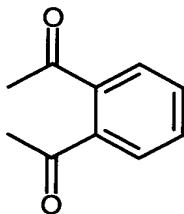
n is 1, 2, 3 or 4,

R is hydrogen or an organic substituent selected from the group consisting of fused aryl groups, unfused aryl groups, alkyl groups, CN groups, and COOR<sup>2</sup> groups,

R<sup>1</sup> is tert-butyl, P(R)<sub>2</sub>, P(R<sup>2</sup>)<sub>2</sub>, COR, SO<sub>2</sub>PhR, COOR or CONRR<sup>2</sup>,

R<sup>2</sup> is alkyl or phenyl,

or R and R<sup>1</sup> together form



wherein the  $\alpha,\omega$ -diene optionally bears at least one further substituent R in any other position with the exception of the  $\alpha$  position,

wherein the catalyst component is a ruthenium, osmium, or a molybdenum homogenous catalyst or a heterogeneous catalyst selected from the group

consisting of (i) transition metal carbenes, (ii) transition metal compounds that form transition metal carbenes under the reaction conditions, and (iii) transition metal salts in combination with an alkylating agent.

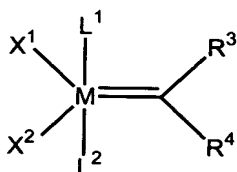
57. (New) The process of Claim 56, wherein n is 1 or 2.

58. (New) The process of Claim 56, wherein n is 1.

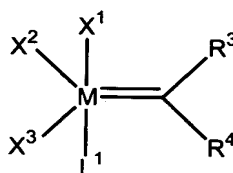
59. (New) The process of Claim 56, wherein the  $\alpha,\omega$ -diene is diallylamine or 3-amino-1,7-octadiene, or 1,7-octadiene, 10-undecenoyl-allylamide, 1,4-bis-oxypropen-2-yl-but-2-ine or buten-4-yl 10-undecenoate.

60. (New) The process of Claim 59, wherein the  $\alpha,\omega$ -diene is in N-carboxymethyl-protected form.

61. (New) The process of Claim 56, wherein the catalyst component is a compound of formula (III) or (IV):



(III)



(IV)

wherein M is ruthenium or osmium, and

wherein  $\text{R}^3$  to  $\text{R}^7$  are radicals selected from the group consisting of hydrogen,  $\text{C}_1$ - $\text{C}_{20}$ -alkyl,  $\text{C}_3$ - $\text{C}_8$ -cycloalkyl,  $\text{C}_2$ - $\text{C}_{20}$ -alkenyl,  $\text{C}_2$ - $\text{C}_{20}$ -alkinyl,  $\text{C}_6$ - $\text{C}_{18}$ -aryl,  $\text{C}_1$ - $\text{C}_{20}$ -carboxylate,  $\text{C}_1$ - $\text{C}_{20}$ -alkoxy,  $\text{C}_2$ - $\text{C}_{20}$ -alkenyloxy,  $\text{C}_2$ - $\text{C}_{20}$ -alkinyloxy,  $\text{C}_6$ - $\text{C}_{18}$ -aryloxy,  $\text{C}_2$ - $\text{C}_{20}$ -alkoxycarbonyl,  $\text{C}_1$ - $\text{C}_{20}$ -alkylthio,  $\text{C}_1$ - $\text{C}_{20}$ -alkylsulfonyl and  $\text{C}_1$ - $\text{C}_{20}$ -alkylsulfinyl, N-aryl; wherein in each case unsubstituted or substituted by  $\text{C}_1$ - $\text{C}_9$ -alkyl, perfluoroalkyl, halogen,  $\text{C}_1$ - $\text{C}_5$ -alkoxy or  $\text{C}_6$ - $\text{C}_{18}$ -aryl; and wherein the radicals  $\text{R}^3$  to  $\text{R}^7$  may be linked to one another in cyclic compounds,

$\text{X}^1$  to  $\text{X}^3$  are anionic ligands are selected from the group consisting of  $\text{F}^-$ ,  $\text{Cl}^-$ ,  $\text{Br}^-$ ,  $\text{CN}^-$ ,  $\text{SCN}^-$ ,  $\text{R}^3\text{O}^-$ ,  $\text{R}^3\text{R}^4\text{N}^-$ ,  $(\text{R}^3-\text{R}^7)\text{-allyl}^-$ ,  $(\text{R}^3-\text{R}^7)\text{-cyclopentadienyl}^-$ , wherein the radicals  $\text{R}^3$  to  $\text{R}^7$  are as defined above,

$\text{L}^1$  to  $\text{L}^3$  are uncharged ligands are selected from the group consisting of  $\text{CO}$ ,  $\text{CO}_2$ ,  $\text{R}^3\text{NCO}$ ,  $\text{R}^3\text{R}^4\text{C}=\text{CR}^5\text{R}^6$ ,  $\text{R}^3\text{C}\equiv\text{CR}^4$ ,  $\text{R}^3\text{R}^4\text{C}=\text{NR}^5$ ,  $\text{R}^3\text{C}\equiv\text{N}$ ,  $\text{R}^3\text{OR}^4$ ,  $\text{R}^3\text{SR}^4$ ,

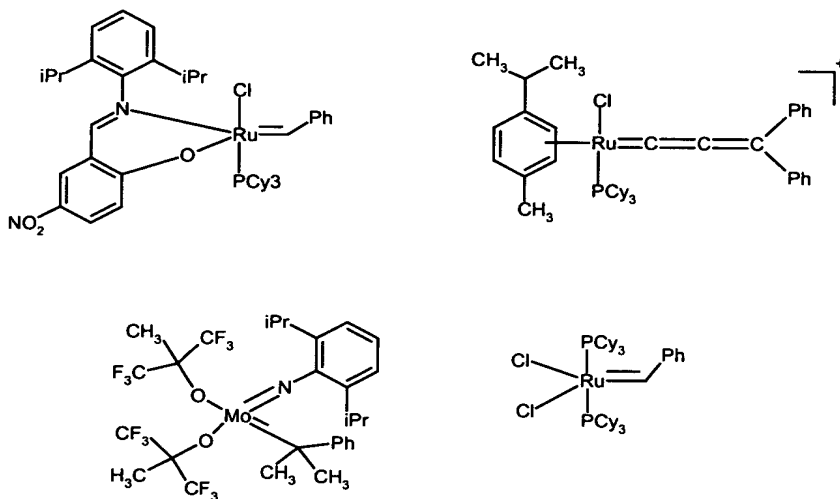
$\text{NR}^3\text{R}^4\text{R}^5$ ,  $\text{PR}^3\text{R}^4\text{R}^5$ ,  $\text{AsR}^3\text{R}^4\text{R}^5$ ,  $\text{SbR}^3\text{R}^4\text{R}^5$ , wherein the radicals  $\text{R}^3$  to  $\text{R}^5$  are as defined above and  $m$  is 1 or 2.

62. (New) The process of Claim 61, wherein the catalyst component is a compound of the formula (III) and/or (IV), wherein  $\text{L}^1$  and  $\text{L}^2$  is  $\text{PR}^3\text{R}^4\text{R}^5$ .

63. (New) The process of Claim 62, wherein  $\text{R}^3$ ,  $\text{R}^4$ , and  $\text{R}^5$  are selected from the group consisting of aryl and alkyl groups.

64. (New) The process of Claim 62, wherein  $\text{R}^3$ ,  $\text{R}^4$ , and  $\text{R}^5$  are selected from the group consisting of secondary alkyl radicals and cycloalkyl radicals.

65. (New) The process of Claim 56, wherein the catalyst component is selected from one or more of the following compounds:



66. (New) The process of Claim 56, wherein the ionic liquid is ammonium hexafluorophosphate, ammonium tetrafluoroborate, ammonium tosylate, or ammonium hydrogen sulfate and salt mixtures comprising aluminium halides in combination with at least one quaternary ammonium halide and/or at least one quaternary phosphonium halide.

67. (New) The process of Claim 56, wherein the ionic liquid is pyridinium hexafluorophosphate, pyridinium tetrafluoroborate, pyridinium hydrogen sulfate, 1-methyl-3-butylimidazolium hexafluorophosphate or combinations of aluminium chloride with 1-methyl-3-butylimidazolium chloride, 1-methyl-3-ethylimidazolium

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chloride, N-butylpyridinium chloride and tetrabutylphosphonium  
halide.--

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